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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,488	01/07/2005	Motoki Kato	275873US6PCT	6535
22850 7590 07/16/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TOPGYAL, GELEK W	
			ART UNIT	PAPER NUMBER
			2621	
			NOTIFICATION DATE	DELIVERY MODE
			07/16/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/520,488	KATO, MOTOKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	GELEK TOPGYAL	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation function." The New IEEE Standard Dictionary of Electrical and Electronic Terms 308 (5<sup>th</sup> ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held statutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

**Claim 12** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 12 defines a *program* embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to

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be realized” – Guidelines Annex IV). That is, the scope of the presently claimed *a program* can range from a paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on “computer-readable medium” or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

### DETAILED ACTION

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Ashley et al. (US 6,584,273).

**Regarding claims 1, 9-10, 12, 14, 16, 19 and 22**, the prior admitted art teaches an information processing device that decodes a multiplexed stream which includes a data stream constituted by a plurality of source packets each having a transport packet and its arrival time stamp, and in which a second picture, which is the first picture of a second multiplexed stream, is connected to a first picture, which is the last picture of a first multiplexed stream so as to be reproduced seamlessly (page 3 of the specification teaches of two streams TS1 and TS2 that are multiplexes and are further desired to be reproduced seamlessly), comprising:

output means for outputting the source packets according to the arrival time stamp of the multiplexed stream (Fig. 1 teaches of a source depacketizer 113 capable of outputting the source packets according to the arrival time base of the source packet);

a video buffer for buffering video data included in the source packets; an audio buffer for buffering audio data included in the source packets (Fig. 1 teaches of buffering operations of TB1, MB1, EB1, TBn, Bn, TBsys and TBsys);

video decoding means for decoding the video data buffered in the video buffer; and audio decoding means for decoding the audio data buffered in the audio buffer (Fig. 1 teaches of decoders TB1, TBn and TBsys placed within overall decoder 120), wherein

The admitted prior art cites the need to have greater buffer capacity for the audio buffer. However, fails to particularly teach wherein: the audio buffer having a capacity capable of buffering the audio data corresponding to the time required for inputting the second picture to the video buffer.

In an analogous art, Ashley et al. teaches in col. 10, lines 32-40 of the ability to double the size of the buffer so that after a transition time of 1s, "only data in the STD buffer comes from a new sequence". Therefore, although not explicit, Ashley et al. system audio buffer has enough capacity to buffer the audio data corresponding to the time required for inputting the "new sequence". It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the ability of Ashley into the admitted prior art so that audio and video production have be seamless.

**Regarding claims 2, 11, 13, 15, 17 and 20**, as discussed in claims 1, 10, 12, 14, 16, 19 and 22 above, although not explicitly discussed, the condition of the equations are met since the audio buffer of Ashley et al. is able to buffer the audio data corresponding to the time required for inputting the “new sequence” into its' respective buffer.

**Regarding claims 3, 18 and 21**, as discussed in claims 1, 10, 12, 14, 16, 19 and 22 above, since the audio buffer of Ashley et al. is able to buffer the audio data corresponding to the time required for inputting the “new sequence” into its' respective buffer, the first set of data to arrive into its' respective buffer would be an I frame.

**Regarding claim 4**, Ashley et al. teaches the claimed in col. 11, lines 6-10.

**Regarding claims 5 and 6**, the admitted prior art recites the very same equations that set conditions for the multiplexed stream in pages 5-8 of the specification.

**Regarding claims 7-8**, the admitted prior art recites the claimed as discussed in claims 5-6 above and the claims  $ATC\_Delta$  is met by  $T_{pp}$  value in equation (2).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references teach system capable of joining two different video programs together and the ability to reproduce them seamlessly.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GELEK TOPGYAL whose telephone number is (571)272-8891. The examiner can normally be reached on 8:30am -5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gelek Topgyal/  
Examiner, Art Unit 2621

/JAMIE JO VENT ATALA/  
Examiner, Art Unit 2621